DENON

DIRECT DRIVE MANUAL TURNTABLE SYSTEM

DP-A100

Owner's Manual

Manuel de l'Utilisateur

Manual del usuario

☐ SAFETY PRECAUTIONS



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



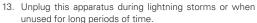
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

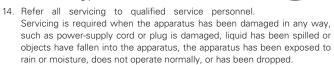
WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings.
 - Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.





 Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

CAUTION:

To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.

The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

PRECAUTION:

Pour déconnecter complètement ce produit du courant secteur, débranchez la prise de la prise murale.

La prise secteur est utilisée pour couper complètement l'alimentation de l'appareil et l'utilisateur doit pouvoir y accéder facilement.

PRECAUCIÓN:

Para desconectar completamente este producto de la alimentación eléctrica, desconecte el enchufe del enchufe de la pared.

El enchufe de la alimentación eléctrica se utiliza para interrumpir por completo el suministro de alimentación eléctrica a la unidad y debe de encontrarse en un lugar al que el usuario tenga fácil acceso.

FCC INFORMATION (For US customers)

1. PRODUCT

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

2. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

3. NOTE

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

For Canadian customers:

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

□ NOTES ON USE / OBSERVATIONS RELATIVES A L'UTILISATION / NOTAS SOBRE EL USO

WARNINGS Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack. Handle the power cord carefully. Hold the plug when unplugging the cord. · Keep the unit free from moisture, water, and dust. • Unplug the power cord when not using the unit for long periods of time. • Do not obstruct the ventilation holes. • Do not let foreign objects into the unit. • Do not let insecticides, benzene, and thinner come in contact with the unit. • Never disassemble or modify the unit in any way. Ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths or curtains. • Naked flame sources such as lighted candles should not be placed on the unit. Observe and follow local regulations regarding battery disposal. • Do not expose the unit to dripping or splashing fluids. • Do not place objects filled with liquids, such as vases, on the unit. • Do not handle the mains cord with wet hands. • When the switch is in the OFF position, the equipment is not completely switched off from

MAINS.

accessible.

• The equipment shall be installed near the

power supply so that the power supply is easily

AVERTISSEMENTS

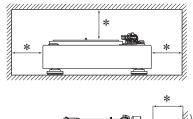
Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.

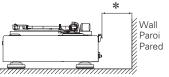
- Manipuler le cordon d'alimentation avec précaution.
- Tenir la prise lors du débranchement du cordon.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Ne pas obstruer les trous d'aération.
- Ne pas laisser des objets étrangers dans l'appareil.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.
- Ne pas recouvrir les orifices de ventilation avec des objets tels que des journaux, nappes ou rideaux. Cela entraverait la ventilation.
- Ne jamais placer de flamme nue sur l'appareil, notamment des bougies allumées.
- Veillez à respecter les lois en vigueur lorsque vous jetez les piles usagées.
- L'appareil ne doit pas être exposé à l'eau ou à l'humidité.
- Ne pas poser d'objet contenant du liquide, par exemple un vase, sur l'appareil.
- Ne pas manipuler le cordon d'alimentation avec les mains mouillées.
- Lorsque l'interrupteur est sur la position OFF, l'appareil n'est pas complètement déconnecté du SECTEUR (MAINS).
- L'appareil sera installé près de la source d'alimentation, de sorte que cette dernière soit facilement accessible.

ADVERTENCIAS

- Evite altas temperaturas.
 Permite la suficiente dispersión del calor cuando está instalado en la consola.
- Maneje el cordón de energía con cuidado.
 Sostenga el enchufe cuando desconecte el cordón de energía.
- Mantenga el equipo libre de humedad, agua y polvo.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.
- No obstruya los orificios de ventilación.
- No deje objetos extraños dentro del equipo.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.
- Nunca desarme o modifique el equipo de ninguna manera.
- La ventilación no debe quedar obstruida por haberse cubierto las aperturas con objetos como periódicos, manteles o cortinas.
- No deberán colocarse sobre el aparato fuentes inflamables sin protección, como velas encendidas.
- A la hora de deshacerse de las pilas, respete la normativa para el cuidado del medio ambiente.
- No exponer el aparato al goteo o salpicaduras cuando se utilice.
- No colocar sobre el aparato objetos llenos de líquido, como jarros.
- No maneje el cable de alimentación con las manos mojadas.
- Cuando el interruptor está en la posición OFF, el equipo no está completamente desconectado de la alimentación MAINS.
- El equipo se instalará cerca de la fuente de alimentación de manera que resulte fácil acceder a ella.

☐ CAUTIONS ON INSTALLATION PRÉCAUTIONS D'INSTALLATION EMPLAZAMIENTO DE LA INSTALACIÓN





- * For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.
- More than 0.3 m (12 in.) is recommended.
- Do not place any other equipment on this unit.
- * Pour permettre la dissipation de chaleur requise, n'installez pas cette unité dans un espace confiné tel qu'une bibliothèque ou un endroit similaire.
- Une distance de plus de 0,3 m (12 po) est recommandée.
- Ne placez aucun matériel sur cet appareil.
- * Para la dispersión del calor adecuadamente, no instale este equipo en un lugar confinado tal como una librería o unidad similar.
- Se recomienda dejar más de 0,3 m (12 pulg.) alrededor.
- No coloque ningún otro equipo sobre la unidad.

Getting started

Thank you for purchasing this DENON product. To ensure proper operation, please read these owner's manual carefully before using the product. After reading them, be sure to keep them for future reference.

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Cautions on handling
Maintenance
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Part names and functions

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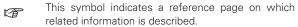
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About this manual

□ Symbols





This symbol indicates a supplementary information and tips for operations.

NOTE

This symbol indicates points to remember operations or function limitations.

□ Illustrations

Note that the illustrations in these instructions are for explanation purposes and may differ from the actual unit.

Accessories

Check that the following parts are supplied with the product.			
1 Owner's manual			
3	4		(5) (0)
6	① (8	9
10	11)	12	(3)

Features

Cabinet with natural wood exterior in dark brown with gloss finish

The cabinet is made with natural wood veneer overgrazed like Japanese lacquerware, with rich, glossy finish.

Stereo MC cartridge DL-A100 included

DL-103 was launched for Japan broadcasting Corporation in 1964, and continued to be standard cartridge during 50 years. DL-A100 is reproduction of engineering reference model of DL-103.

Hybrid double-layered large turntable for stable rotation

The die-cast aluminum turntable is 331 mm in diameter. Silicon rubber covers the entire rear surface for deadening treatment to absorb howl.

Quartz lock servo and direct-drive system for stable rotation

The player includes a quartz lock servo system that controls rotation speed by detecting the interval of optical pulses from a slit in the motor. Stable control of reduced wow and flutter and high accurate rotation with little eccentricity are achieved.

Universal-type tone arm and lathe machinedaluminum head shell

A tone arm on a large die-cast aluminum base whose height can be adjusted within 6 mm assures smooth and accurate tracing. The combination of the tone arm and lathe machined-aluminum head shell suppresses undesirable resonance that would affect sound quality, as well as taking best advantage of the characteristics of the cartridge.

Ample insulator

The cabinet is well insulated to absorb any vibration.

Cautions on handling

· Before turning the power switch on

Check once again that all connections are correct and that there are no problems with the connection cables.

 When going on vacation or leaving home for long periods of time, be sure to unplug the power cord from the power outlet.

About Condensation

If there is a major difference in temperature between the inside of the unit and the surroundings, condensation (dew) may form on the operating parts inside the unit, causing the unit not to operate properly.

If this happens, let the unit sit for an hour or two with the power turned off and wait until there is little difference in temperature before using the unit.

Moving the unit

Turn off the power and unplug the power cord from the power outlet. Next, disconnect the connection cables to other system units before moving the unit.

About Care

Clean the cabinet and dust cover with the included wiping cloth. Follow the instructions when using a chemical cleaner.

Benzene, paint thinner or other organic solvents as well as insecticide may cause material changes and discoloration if brought into contact with the unit, and should therefore not be used.

Extrior finish

The cabinet has a dark brown glossy finish. As fine scratches may be prominent, use the included wiping cloth to clean the surface.

Lubricating

The motor does not require lubricating. Do not lubricate the player.

Maintenance

Stylus life (DL-A100)

The stylus has service life of about 2000 hours. It depends on the operating conditions. If the stylus tip is worn, high-frequency sound will be rough and distorted. To avoid damaging valuable records, replace the cartridge without delay.

Cleaning the stylus tip

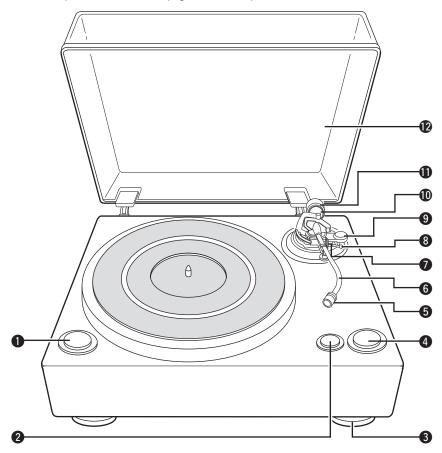
The stylus tip is very delicate and requires sufficient care. Remove dust from the stylus tip with a soft brush (included with the cartridge).

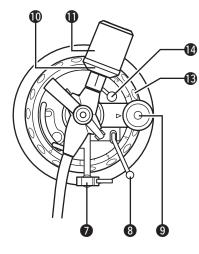
Note on lubricating

The motor does not require lubricating. Do not lubricate the player. Doing so may damage the player.

Part names and functions

For buttons not explained here, see the page indicated in parentheses ().



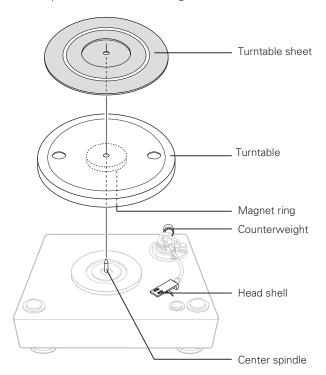


POWER switch	(7)
SPEED button	(7)
3 Insulator	(5)
START/STOP button	(7)
5 Lock nut	
Tone arm ······	(5)
7 Armrest ·····	(5)
Lifter lever	(6, 7)
9 ANTI-SKATING knob	(6)
DStylus pressure adjustment ring	(6)
Counterweight	(6)
Dust cover	(5)
Arm height adjustment ring	(5)
Arm height lock knob	(5)

Preparations

Assembly

Before use, attach the included parts to the main unit. Turn the power off when assembling.



Mounting the turntable

Mount the turntable on the Center spindle.

Mount the turntable sheet.

NOTE

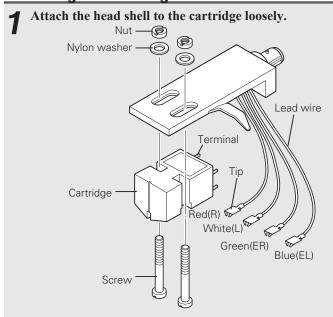
Take care not to scratch the magnet ring on the rear of the turntable.

Mounting the counterweight

Insert the counterweight onto the shaft at the back of the tone arm and screw it in.

• Mount with the stylus pressure adjustment ring towards the front.

Mounting the cartridge

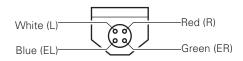


NOTE

Use the included screws, nuts, and nylon washers.

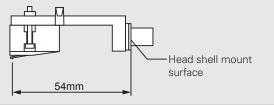


If the lead wire on the head shell is disconnected, connect the tip of the lead wire to the terminal, as shown below.



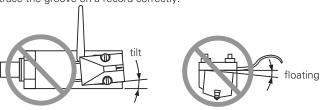
Mount the head shell so that the stylus tip is positioned about 54 mm from the edge of the head shell's mount surface, and fasten the screw.

54mm: This is the distance at which the stylus tip traces the left and right channels with optimum balance according to the positioning of the turntable and tone arm. (overhang value)



NOTE

Mount the cartridge with no tilt or floating so that the stylus tip can trace the groove on a record correctly.



Connecting the lead wires

- Connect the lead wires to the terminals on the cartridge.
- Use tweezers for this task.

Name of terminals of a cartridge	Color of the lead wire
L (left channel)	White
EL (left-channel grounding)	Blue
R (right channel)	Red
ER (right-channel grounding)	Green

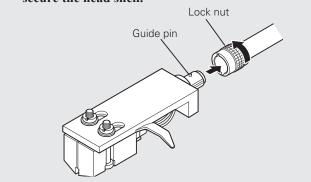
Assembly

Mounting the head shell

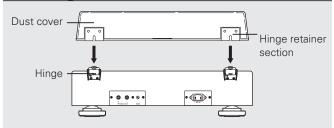
To protect the stylus tip, attach the stylus cover to the cartridge.

1 Insert the head shell to the end of a tone arm with the guide pin facing upward.

2 Turn the lock nut in the direction of the arrow to secure the head shell.



Mounting the dust cover



Mount the hinge retainer section of the dust cover onto the hinges.

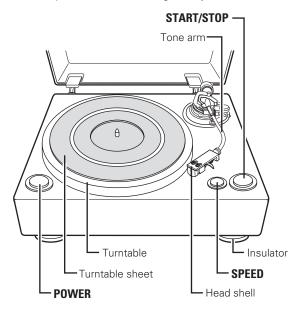
- Insert fully in the direction of the arrow.
- When removing the dust cover, open the dust cover fully then pull out in the direction opposite the arrow.

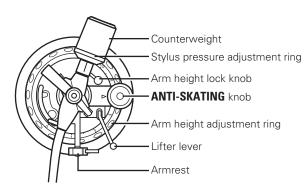


- Hold the dust cover near the hinge retainer sections when mounting and removing it.
- Use the included gloves when mounting and removing the dust cover.

Adjustments

Turn the power off when making the adjustments.





Adjusting the height of the insulators

Turn the insulators to adjust their height so that the turntable is placed level.

Turning an insulator foot clockwise increases height, and turning it counterclockwise decreases it.



Using a commercial level allows more accurate adjustment.

Adjusting the height of the tone arm

This adjustment is for the stylus tip of the cartridge so that it will trace the groove of a record correctly. Adjust the height of the tone arm so that it will be parallel to the record when the stylus is placed on a record.

Adjust it for the cartridge or head shell to be used.

When the included head shell and cartridge are to be used, adjust the arm height adjustment ring to "0".

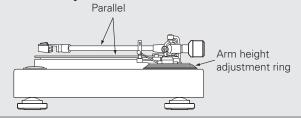
Place the stylus tip on a record, and check that the tone arm is parallel to the record.

If it is not parallel, perform steps 2 to 5.

Return the tone arm to the armrest.

Turn the arm height fix knob fully counterclockwise. The lock of the arm height adjustment ring is released.

Turn the arm height adjustment ring so that the tone arm will be parallel to the record.



5 Turn the arm height fix knob fully clockwise. The arm height adjustment ring is fixed.



The tone arm will not be parallel to the record with some cartridges. For such a cartridge, insert the included cartridge spacer between the head shell and cartridge, then adjust the height so that the tone arm will be parallel to the record.

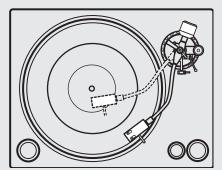
Adjustments

Adjusting the stylus pressure and anti-skating

Adjust the stylus pressure for the cartridge to be used. Anti-skating adjustment is for negating the affect of centrifugal force on the stylus tip caused by rotation of a record during playing.

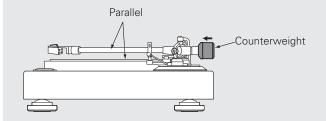
1 Set the ANTI-SKATING knob to "0".

2 Lower the lifter lever and move the tone arm over the turntable.



- For a cartridge with a removable stylus cover, remove the stylus cover.
- Turn the counterweight so that the tone arm will be parallel to the turntable when the head shell is gently released from holding status.

To protect the stylus tip, turn the counterweight slowly and move it in the direction of the arrow.



If the cartridge to be used is too light or too heavy, the tone arm will
not be level. For such a cartridge, use an optional counterweight
(sold separately) made by our company. For details, consult your
nearest repair outlet.

4 Return the tone arm to the armrest.

5 Holding the counterweight with a finger so that it does not move, turn the stylus pressure adjustment ring so that it's "0" mark is lined up with the black line of the tone arm's rear shaft.



Turn the stylus pressure adjustment ring only.

6 Turn the counterweight in the direction of arrow and set to the appropriate stylus pressure for the cartridge.



- The appropriate stylus pressure for the included cartridge is 2.5 g. Set to "2.5".
- For the appropriate stylus pressure for the cartridge to be used, refer to the operation manual for the cartridge.
- **7** Turn the **ANTI-SKATING** knob and set to the same value as for the cartridge's stylus pressure.

For the cartridge of the stylus pressure of 3.0 g or more, set to "3".

The proper anti-skating value can be achieved.



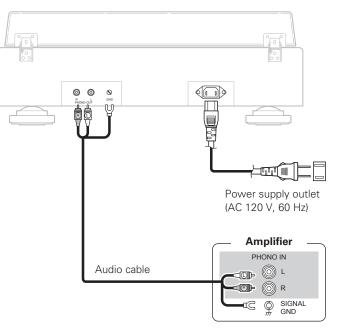
NOTE

Take care not to damage the stylus tip with the turntable sheet.

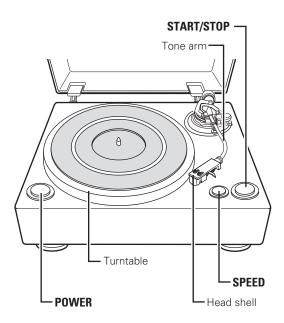
Connections

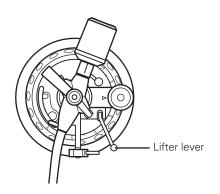
NOTE

- Do not plug in the power cord until all connections have been completed.
- When making connections, also refer to the operating instructions of the other components being connected.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Do not bundle power cords together with connection cables. Doing so can result in noise.



Operation





Turning power on

Press POWER to set it to "-ON".

The "33" indicator on the surface of SPEED lights in amber.



If the player is not to be used for extended period, be sure to disconnect the power cord.

Playback

◄ Place a record on the turntable.

For EP ("doughnut") records, use the included 45 rpm adapter.

2 Set the record's playing speed, using SPEED. Each time SPEED is pressed, the "45" or "33" indicator on SPEED lights alternately.

- "45" indicator (green): The turntable rotates at 45 rpm.
- "33" indicator (amber): The turntable rotates at 33-1/3 rpm.
- ? Press START/STOP.

The turntable starts turning.

4 Raise the lifter lever and holding the head shell's finger catch move the tone arm to the beginning of the selection you want to play.

5 Lower the lifter lever. The tone arm lowers the s

The tone arm lowers the stylus tip slowly onto the record and playback starts.

NOTE

- Be careful not to scratch the record.
- During playback, pay special attention to the points described below.
- Do not touch the tone arm or turntable.
- Do not turn the power off.
- Do not apply vibration or shock to the player.
- To change the record, replace it after the turntable stops.
- Do not try to stop the turntable forcibly while it is rotating. The inside of the turntable may become hot and it may cause malfunction or fire.

Stopping playback

◄ Raise the lifter lever slowly.

The tone arm raises and the stylus tip removed from the record.

2 Return the tone arm by holding the head shell's finger catch to the armrest.

3 Lower the lifter lever.

A Fix the tone arm to the armrest.

5 Press START/STOP. The rotation of the turntable stops.

NOTE

To protect the stylus tip of the cartridge, attach the stylus cover when the player is not to be used.

Troubleshooting

If a problem should arise, first check the following:

- 1. Are the connections correct?
- 2. Is the set being operated as described in the owner's manual?
- 3. Are the other components operating properly?

If this unit does not operate properly, check the items listed in the table below. Should the problem persist, there may be a malfunction.

In this case, disconnect the power immediately and contact your store of purchase.

Symptom	Cause	Solution	Page
The stylus tip does not come down to	• The tone arm height is not adjusted correctly.	Adjust it correctly.	5
the record.	• The stylus pressure is not adjusted correctly.	Adjust it correctly.	6
	Weight balance of the arm is not adjusted.	Adjust it correctly.	5, 6
No sound is produced.	The cartridge and a head shell are not connected correctly.	Check the connections.	4
	Audio cables are not connected to the amplifier correctly.	Check the connections.	6
	Adjustment or switching on the amplifier is not correct.	Check the settings on the amplifier.	-
A wall of static is heard.	• The ground wire of an audio cable is not connected to the amplifier.	Check the connections.	6
	The plug of an audio cable is not connected to the amplifier correctly.	Check the connections.	6
	The head shell is not secured with the lock nut.	Check the mounting.	5
The record skips. The sound is	• The stylus pressure is not at the adequate value.	Adjust it correctly.	6
scratchy. The sound is	The record is warped or scratched.	Check the record.	_
distorted.	The stylus or record is dirty.The stylus is worn.	Remove any dirt.Replace the cartridge.	2 2
The arm does not move in the middle.	The arm is touching something. The record is scratched.	Check the arm. Check the record.	_ _ _
The sound is weak or too strong.	• The amplifier's cartridge setting (MC/MM) is not set correctly.	• Set the cartridge settings to the cartridge to be used (MC/MM) on the amplifier.	-

Specifications

□ Turntable section

Driving system: Servo system direct drive

 Speed:
 33-1/3rpm, 45rpm

 Wow & flutter:
 Less than 0.1 % WRMS

Starting time:Specified speed within 0.3 sec (for 33 rpm)Turntable:Aluminum die-cast, 331 mm (13-1/32") in diameter

 Motor:
 Direct-drive motor

 Speed control system:
 Quartz control

Load characteristics: 0 % with the stylus pressure 80 g (2.8 oz)

Speed deviation: Within $\pm 0.003 \%$

■ Tone arm section

Arm form: Static balance S-shaped pipe arm

 Effective arm length:
 244 mm (9-39/64")

 Overhang:
 14 mm (35/64")

 Tracking error:
 within 3°

Arm height adjustable range: about 6 mm (15/64")

Stylus pressure variable range: 0 to 4.0 g (0.14 oz)

One step 0.1 g

Suitable cartridge empty weight: 4 to 10 g (0.14 oz to 0.35 oz)

Head shell weight: 18 g (0.63 oz, including screws, nuts, nylon washers)

Cartridge spacer weight: 0.25 g (0.01 oz, 1 sheet)

□ Total

Power supply: AC 120 V, 60 Hz

Power consumption: 10 W

Maximum external dimensions: With dust cover closed:

490 (W) ×213 (H) × 405 (D) mm (19-19/64" x 8-25/64" x 15-15/16")

With dust cover open:

490 (W) ×515 (H) × 465 (D) mm (19-19/64" x 20-9/32" x 18-5/16")

Weight: 15.7 kg (0.55 oz)

☐ Cartridge (DL-A100)

Power generation method: Moving coil (MC) type

Output voltage: 0.3 mV (1 kHz 50 mm/sec horizontally)

Channel balance: within 1 dB (1 kHz) **Channel separation:** more than 25dB (1 kHz)

Impedance: $40 \Omega \pm 20 \%$

Compliance: $5 \times 10\text{-6}$ cm/dyne (used 100 Hz record)Stylus tip:0.2 rm (1/64") square solid diamondStylus pressure: $2.5 \text{ g} \pm 0.3 \text{ g} (0.09 \text{ oz} \pm 0.01 \text{ oz})$

 Frequency response:
 20 Hz to 45 kHz

 Weight:
 8.8 g (0.31 oz)

Load resistance: more than 100 Ω (40 Ω when a transformer is used) **Maximum external dimensions:** 15 (W) \times 15 (H) \times 26.8 (D) mm (19/32" \times 19/32" \times 1-1/16")

 \star For purposes of improvement, specifications and design are subject to change without notice.

